

Set Board up to address FFFFF400.  
JP1--1-4     OUT           JP11   OUT  
      5     IN            JP12   OUT  
      6     OUT          JP13   OUT  
      7-8   IN            JP14   OUT  
      9-10   OUT

This is board "C" in a 3 board system.

From a terminal window...  
acnsun62 105:rlogin cfe-911-bob  
VxWorks login: target  
Password: xx (you should know this)

-> d 0xffffffff400,128,1  
fffff400:  2e 56 2e 4d 2e 45 2e 49 2e 44 2e 42 2e 4e 2e 4c   \*.V.M.E.I.D.B.N.L\*  
fffff410:  2e 56 2e 31 2e 32 2e 30 2e 00 2e 00 2e 00 2e 00   \*.V.1.2.0.....\*  
fffff420:  2e 00 2e 44 2e 00 2e 00 2e 00 2e 00 2e 31 2e 36   \*...D.....1.6\*  
fffff430:  2e 00 2e 00 2e 00 2e 00 2e 00 2e 00 2e 00 2e 00   \*.....\*  
fffff440:  00 03 00 00 00 80 45 03 3f 3f 3f 3f 3f 3f 3f 00   \*.....E.??????.\*  
fffff450:  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff   \*.....\*  
fffff460:  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff   \*.....\*  
fffff470:  ff ff ff ff ff ff ff ff ff ff ff ff ff ff ff   \*.....\*  
value = 21 = 0x15

Check that the display is similar to the above, the "D" should be the boards present Rev. letter and the "16" is the boards S/N.

Start a PET page from StartUp.  
Start  
RHIC applications  
Pet & Pet Pages  
Generic pet  
FECs  
Links  
Permit  
911-bob  
bobC

\*\*\*\*\*  
If the pet pages for the permit modules come up red, even though you think the ados are loaded properly, it may be because CNS has been refreshed and I didn't bother putting this temporary configuration information into the database. You can add the entries needed with three lines:

cnsadd ADO permit permit.bobA cfe-911-bob 1000002 1  
cnsadd ADO permit permit.bobB cfe-911-bob 1000002 1  
cnsadd ADO permit permit.bobC cfe-911-bob 1000002 1

if you get a message like this...

Could not add entry to CNS  
CNS entry already exists with that name  
Could not add entry to CNS  
CNS entry already exists with that name  
Could not add entry to CNS  
CNS entry already exists with that name

You haven't broken anything, but it means that there's  
another problem with the pet page  
\*\*\*\*\*

Enable all inputs.  
No masks in use.  
Trigger quench link.  
Trigger permit link.  
Check that all input statuses are OK.  
Link Status should be OK at this point.  
PERMIT & QUENCH output levels on the I/O panel should be at a logic "1" (~4V).  
Event carrier failed should be OK.  
Disconnect the event link from the front panel.  
Event carrier failed should be FAIL and the front panel LED should be off.  
Reconnect the event link to the front panel.  
Event carrier failed should be OK and the front panel LED should be on.  
Clear Timestamps, trigger input 1 on the input panel with the test card.  
Link status goes to FAIL upstream failure has a timestamp value, input 1 goes  
"DOWN" and PERMIT level output from the I/O panel goes to ZERO.  
Trigger input 1 again and verify timestamp and status does not change.  
Trigger permit link.  
Link status goes to OK and upstream corrected time is updated and input goes  
"Up".  
Clear timestamps.  
Repeat for inputs 2 to 6.

Trigger input 7.  
Check that BLUE interlock output from panel goes to ZERO.  
Link status is now FAIL.  
Blue carrier failed = FAIL.  
Quench input 1 is down.  
Trigger quench link.  
Quench input 1 is Up and Blue corrected time is updated.  
Carrier failed goes to OK and link status is OK.  
Trigger permit.  
Link status = OK.

Trigger input 8.  
Check that YELLOW interlock output from panel goes to ZERO.  
Link status is now FAIL.  
Yellow carrier failed = FAIL.  
Quench input 2 is down.  
Trigger quench link.  
Quench input 2 is Up and Yellow corrected time is updated.  
Carrier failed goes to OK and link status is OK.  
Trigger permit.  
Link status = OK.

Disable all permit inputs.  
Trigger inputs 1 to 6 and check that none of the input statuses go "down" and  
that link status remains OK.

Enable all inputs.  
Select mask0.  
Trigger permit link.  
Mask 0 value should be 0x3F.  
Clear timestamps.

Trigger inputs 1 to 6 and verify that the link status remains OK and a timestamp value appeared for each input. Trigger input again and verify timestamp is updated.

Set mask 0 value to 0x0, trigger one of the inputs (1 to 6) and verify that the link status went to FAIL.  
Set mask 0 value to 0x3F.  
Trigger permit link, and verify link status is OK.

The green LED's on the V120 front panel should all be green when valid inputs are present. Disconnect each of the 6 permit inputs from the I/O panel and verify that the corresponding LED goes out. Disconnect each of the quench inputs (7 & 8) and verify that the corresponding LED goes out. Reconnect the inputs.

Restart the quench and permit links. The permit link, blue int and yellow int LED's should be on. Trigger one of the quench inputs, the corresponding quench link LED and the permit link LED should go off, trigger the other quench link and then that LED should go off.

Restart the quench and permit links. The permit link, blue int and yellow int LED's should be on. Remove one of the quench link blue hose cables, the corresponding quench link LED and the permit link LED should go off, remove the other quench link blue hose cable and then that LED should go off. Reconnect the cables.  
Restart the quench and permit links. The permit link, blue int and yellow int LED's should be on. Remove the permit link blue hose cable and verify that the permit link FAILS on the pet page.

V120 JUMPER LIST

FIRST BOARD F000  
J1-OUT ADDR.  
J2-OUT ADDR.  
J3-OUT ADDR.  
J4-OUT ADDR.  
J5-IN ADDR.  
J6-IN ADDR.  
J7-IN ADDR.

SECOND BOARD F200  
J1-OUT ADDR.  
J2-OUT ADDR.  
J3-OUT ADDR.  
J4-OUT ADDR.  
J5-IN ADDR.  
J6-IN ADDR.  
J7-OUT ADDR.

J8-IN CLK  
J9-OUT CLK  
J10-OUT CLK

J11-IN QUENCH INPUTS ARE PERMIT INPUTS  
J12-IN MASTER

J13-IN MASK QUENCH  
J14-IN MASK QUENCH